

WHAT IS CLAIMED IS:

1. A bathtub for the disabled or elderly comprising:

5 a tub having an enclosure defined by at least one sidewall,

said sidewall having a doorway therein providing access from an external side of said sidewall, external to said enclosure, into said enclosure,

10 at least one generally horizontal elongate guide vertically spaced apart pair of elongate guides in said sidewall,

a door slidably mounted to said guides on at least one pivotable linkage arm pivotally mounted to both said door and at least one of said guides for generally horizontal translation along said sidewall between a closed position wherein said door is releasably lockably mounted in watertight sealed engagement within said doorway, and an open position clear of said aperture and substantially parallel to said sidewall,

15 a releasable latch and cooperating latch actuator for releasable latching engagement of said door in said watertight sealed engagement in said doorway and for releasing said door from such engagement upon actuation of said latch actuator into a release position by a user in said enclosure,

20 2. The bathtub of claim 1 further comprising a latch release disabling means for disabling said latch actuator when a fluid level in said enclosure is higher than a threshold level below a lowermost sill of said doorway.

3. The bathtub of claim 2 wherein, when said door is in said closed position, said at least one pivotable linkage arm is generally parallel to said sidewall and, when said door is in said open position, said at least one pivotable linkage arm is generally non-parallel to said sidewall.
- 5
4. The bathtub of claim 3 wherein when said at least one pivotable linkage arm is generally non-parallel to said sidewall, said at least one pivotable linkage arm is generally perpendicular to said sidewall.
- 10
5. The bathtub of claim 2 wherein said at least one generally horizontal elongate guide is a vertically spaced apart pair of elongate guides and wherein said at least one pivotable linkage arm includes a pair of vertically spaced apart linkage arms, corresponding to said pair of elongate guides, mounted at a leading side edge of said door, wherein said leading side edge corresponds to the side of said door closest to said guides when said door is in
- 15
- said closed position.
6. The bathtub of claim 5 wherein said at least one pivotable linkage arm includes a third linkage arm mounted to a trailing side edge of said door opposite said leading edge.
- 20
7. The bathtub of claim 2 wherein said guides are a pair of elongate parallel rails each having a slidable collar mounted thereon, and said at least one pivotable linkage arm is a pair of linkage arms each pivotally mounted to one of said slidable collars.
- 25
8. The bathtub of claim 2 wherein said guides include at least one channel in said sidewall, and wherein a follower for sliding along said channel is mounted to corresponding said at least one pivotable linkage arm.

9. The bathtub of claim 2 wherein, in said open position, said door is adjacent said external side of said sidewall.
10. The bathtub of claim 2 wherein, in said open position, said door is adjacent an enclosure side of said sidewall opposite said external side of said sidewall.
11. The bathtub of claim 2 wherein said latch includes at least one resiliently biased latch member which is resiliently urged into latched engagement with a latch member receiver so as to releasably engage said door with an edge of said doorway upon closing of said door into said closed position without actuation of said latch actuator by the user.
12. The bathtub of claim 11 wherein said at least one resiliently biased latch member includes a spring-loaded latch-bolt mounted in said door and said latch member receiver is a bolt-receiving aperture in said edge of said doorway.
13. The bathtub of claim 11 wherein said latch actuator is a lever which at one end protrudes from said door for access by the user in said enclosure, and which at its opposite end is oscillatably mounted to said door, wherein said lever is pivotally mounted to at least one latch drive arm mounted within said door and to said releasable latch for actuation of said latch into, and out of, said releasable latching engagement.
14. The bathtub of claim 13 wherein said releasable latch is a plurality of latches mounted on opposite sides of said door and wherein said at least one latch drive arm interconnects said plurality of latches with said lever for simultaneous actuation of said plurality of latches by rotation of said lever relative to said door.
15. The bathtub of claim 14 wherein said lever protrudes from an upper edge of said door and wherein said plurality of latches are mounted at four opposite corners of said door.

16. The bathtub of claim 15 wherein said plurality of latches are oriented so that actuation of said lever translates said latch members of said plurality of latches horizontally.
- 5 17. The bathtub of claim 16 wherein said latch release disabling means is a float actuated linkage including a float mounted on a lever arm within a fluid reservoir, wherein said reservoir is in fluid communication with enclosure so that a fluid level in said enclosure results in a corresponding fluid level in said reservoir, said lever arm cooperating with a drive linkage so that a fluid level in said reservoir above said threshold level actuates said drive linkage so as to cause a distal end of said drive linkage to interlock with a drive arm of said at least one latch drive arm.
- 10
18. The bathtub of claim 17 wherein said lever is generally vertical and wherein said at least one latch drive arm includes a horizontal drive arm rotatably mounted to said lever between opposite ends of said horizontal drive arm, said opposite ends of said horizontal drive arm actuating two oppositely disposed latches of said plurality of latches.
- 15
19. The bathtub of claim 18 wherein a vertical drive arm in said door is linked at one end to said horizontal drive arm for vertical translation of said vertical drive arm simultaneously with horizontal translation of said horizontal drive arm, and linked at an opposite end to a third latch of said plurality of latches.
- 20
20. The bathtub of claim 19 wherein said distal end of said drive linkage engages said vertical drive arm to prevent said vertical translation upon said float reaching said threshold level.
- 25
21. The bathtub of claim 20 wherein said float and said reservoir are mounted in said sidewall.